SEQUENCE LISTING

<110> Anderson, Christen M.
Carroll, Amy Karen

<120> PRODUCTION OF ADENINE NUCLEOTIDE TRANSLOCATOR (ANT), NOVEL ANT LIGANDS AND SCREENING ASSAYS THEREFOR

<130> 660088.443C1

<140> US 10/763,398
<141> 2004-01-23

<150> 09/569,327
<151> 2000-05-11

<150> PCT/US99/25883
<151> 1999-11-03

<150> 09/393,441
<151> 1999-09-08

<150> 09/185,904
<151> 1998-11-03

<160> 20

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 894
<212> DNA
<213> Homo sapiens

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gccagcaaac agatcagtgc tgagaagcag tacaaaggga tcattgattg tgtggtgaga 180
atccctaagg agcagggctt cctctccttc tggaggggta acctggccaa cgtgatccgt 240
tacttcccca cccaagctct caacttcgcc ttcaaggaca agtacaagca gctcttctta 300
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ttggctgctg atgtgggcag gcgcgcccag cgtgagttcc atggtctggg cgactgtatc 480
atcaagatct tcaagtctga tggcctgagg gggctctacc agggtttcaa cgtctctgtc 540
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gcagtcgcag ggctgctgtc ctacccctttt gacactgttc gtcgtagaat gatgatgcag 720
tccggccgga aaggggccga tattatgtac acggggacag ttgactgctg gaggaagatt 780
gcaaaagacg aaggagccaa ggccttcttc aaaggtgcct ggtccaatgt gctgagaggc 840
atgggcggtg cttttgtatt ggtgttgtat gatgagatca aaaaatatgt ctaa 894

<210> 2
<211> 897
<212> DNA
<213> Homo sapiens

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gccagcaagc agatcactgc agataagcaa tacaaaggca ttatagactg cgtggtccgt 180
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tacttcccca cccaggctct taacttcgcc ttcaaagata aatacaagca gatcttcctg 300
ggtggtgtgg acaagagaac ccagttttgg ctctactttg cagggaatct ggcatcgggt 360
ggtgccgcag gggccacatc cctgtgtttt gtgtaccctc ttgattttgc ccgtacccgt 420
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gtgcagggta ttatcatcta ccgagccgcc tacttcggta tctatgacac tgcaaaggga 600
atgcttccgg atcccaagaa cactcacatc gtcatcagct ggatgatcgc acagactgtc 660
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cagtcagggc gcaaaggaac tgacatcatg tacacaggca cgcttgactg ctggcggaag 780
attgctcgtg atgaaggagg caaagctttt ttcaagggtg catggtccaa tgttctcaga 840
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<210> 3
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<212> DNA
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gccagcaagc agatcgccgc cgacaagcag tacaagggca tcgtggactg cattgtccgc 180
atccccaagg agcagggcgt gctgtccttc tggaggggca accttgccaa cgtcattcgc 240
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ctggcagcgg acgtgggaaa gtcaggcaca gagcgcgagt tccgaggcct gggagactgc 480
ctggtgaaga tcaccaagtc cgacggcatc cggggcctgt accagggctt cagtgtctcc 540
gtgcagggca tcatcatcta ccgggcggcc tacttcggcg tgtacgatac ggccaagggc 600
atgctccccg accccaagaa cacgcacatc gtggtgagct ggatgatcgc gcagaccgtg 660
acggccgtgg ccggcgtggt gtcctacccc ttcgacacgg tgcggcggcg catgatgatg 720
cagtccgggc gcaaaggagc tgacatcatg tacacgggca ccgtcgactg ttggaggaag 780
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<210> 4
<211> 297
<212> PRT
<213> Homo sapiens

<400> 4
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Val Ala Ala Ala Val Ser Lys Thr Ala Val Ala Pro Ile Glu Arg Val
            20   25   30

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Lys Leu Leu Leu Gln Val Gln His Ala Ser Lys Gln Ile Ser Ala Glu
        35                  40                  45
Lys Gln Tyr Lys Gly Ile Ile Asp Cys Val Val Arg Ile Pro Lys Glu
    50                  55                  60
Gln Gly Phe Leu Ser Phe Trp Arg Gly Asn Leu Ala Asn Val Ile Arg
65                  70                  75                  80
Tyr Phe Pro Thr Gln Ala Leu Asn Phe Ala Phe Lys Asp Lys Tyr Lys
                85                  90                  95
Gln Leu Phe Leu Gly Gly Val Asp Arg His Lys Gln Phe Trp Arg Tyr
            100                 105                 110
Phe Ala Gly Asn Leu Ala Ser Gly Gly Ala Ala Gly Ala Thr Ser Leu
        115                 120                 125
Cys Phe Val Tyr Pro Leu Asp Phe Ala Arg Thr Arg Leu Ala Ala Asp
    130                 135                 140
Val Gly Arg Arg Ala Gln Arg Glu Phe His Gly Leu Gly Asp Cys Ile
145                 150                 155                 160
Ile Lys Ile Phe Lys Ser Asp Gly Leu Arg Gly Leu Tyr Gln Gly Phe
                165                 170                 175
Asn Val Ser Val Gln Gly Ile Ile Ile Tyr Arg Ala Ala Tyr Phe Gly
            180                 185                 190
Val Tyr Asp Thr Ala Lys Gly Met Leu Pro Asp Pro Lys Asn Val His
        195                 200                 205
Ile Phe Val Ser Trp Met Ile Ala Gln Ser Val Thr Ala Val Ala Gly
    210                 215                 220
Leu Leu Ser Tyr Pro Phe Asp Thr Val Arg Arg Arg Met Met Met Gln
225                 230                 235                 240
Ser Gly Arg Lys Gly Ala Asp Ile Met Tyr Thr Gly Thr Val Asp Cys
                245                 250                 255
Trp Arg Lys Ile Ala Lys Asp Glu Gly Ala Lys Ala Phe Phe Lys Gly
            260                 265                 270
Ala Trp Ser Asn Val Leu Arg Gly Met Gly Gly Ala Phe Val Leu Val
        275                 280                 285
Leu Tyr Asp Glu Ile Lys Lys Tyr Val
    290                 295


<210> 5
<211> 298
<212> PRT
<213> Homo sapiens

<400> 5
Met Thr Asp Ala Ala Val Ser Phe Ala Lys Asp Phe Leu Ala Gly Gly
 1               5                  10                  15
Val Ala Ala Ala Ile Ser Lys Thr Ala Val Ala Pro Ile Glu Arg Val
            20                  25                  30
Lys Leu Leu Leu Gln Val Gln His Ala Ser Lys Gln Ile Thr Ala Asp
        35                  40                  45
Lys Gln Tyr Lys Gly Ile Ile Asp Cys Val Val Arg Ile Pro Lys Glu
    50                  55                  60
Gln Glu Val Leu Ser Phe Trp Arg Gly Asn Leu Ala Asn Val Ile Arg
65                  70                  75                  80
Tyr Phe Pro Thr Gln Ala Leu Asn Phe Ala Phe Lys Asp Lys Tyr Lys
                85                  90                  95
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Gln Ile Phe Leu Gly Gly Val Asp Lys Arg Thr Gln Phe Trp Leu Tyr
            100                 105                 110
Phe Ala Gly Asn Leu Ala Ser Gly Gly Ala Ala Gly Ala Thr Ser Leu
        115                 120                 125
Cys Phe Val Tyr Pro Leu Asp Phe Ala Arg Thr Arg Leu Ala Ala Asp
    130                 135                 140
Val Gly Lys Ala Gly Ala Glu Arg Glu Phe Arg Gly Leu Gly Asp Cys
145                 150                 155                 160
Leu Val Lys Ile Tyr Lys Ser Asp Gly Ile Lys Gly Leu Tyr Gln Gly
                165                 170                 175
Phe Asn Val Ser Val Gln Gly Ile Ile Ile Tyr Arg Ala Ala Tyr Phe
            180                 185                 190
Gly Ile Tyr Asp Thr Ala Lys Gly Met Leu Pro Asp Pro Lys Asn Thr
        195                 200                 205
His Ile Val Ile Ser Trp Met Ile Ala Gln Thr Val Thr Ala Val Ala
    210                 215                 220
Gly Leu Thr Ser Tyr Pro Phe Asp Thr Val Arg Arg Arg Met Met Met
225                 230                 235                 240
Gln Ser Gly Arg Lys Gly Thr Asp Ile Met Tyr Thr Gly Thr Leu Asp
                245                 250                 255
Cys Trp Arg Lys Ile Ala Arg Asp Glu Gly Gly Lys Ala Phe Phe Lys
            260                 265                 270
Gly Ala Trp Ser Asn Val Leu Arg Gly Met Gly Gly Ala Phe Val Leu
        275                 280                 285
Val Leu Tyr Asp Glu Ile Lys Lys Tyr Thr
    290                 295
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<210> 6
<211> 298
<212> PRT
<213> Homo sapiens

<400> 6

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Met Thr Glu Gln Ala Ile Ser Phe Ala Lys Asp Phe Leu Ala Gly Gly
 1               5                  10                  15
Ile Ala Ala Ala Ile Ser Lys Thr Ala Val Ala Pro Ile Glu Arg Val
            20                  25                  30
Lys Leu Leu Leu Gln Val Gln His Ala Ser Lys Gln Ile Ala Ala Asp
        35                  40                  45
Lys Gln Tyr Lys Gly Ile Val Asp Cys Ile Val Arg Ile Pro Lys Glu
    50                  55                  60
Gln Gly Val Leu Ser Phe Trp Arg Gly Asn Leu Ala Asn Val Ile Arg
65                  70                  75                  80
Tyr Phe Pro Thr Gln Ala Leu Asn Phe Ala Phe Lys Asp Lys Tyr Lys
                85                  90                  95
Gln Ile Phe Leu Gly Gly Val Asp Lys His Thr Gln Phe Trp Arg Tyr
            100                 105                 110
Phe Ala Gly Asn Leu Ala Ser Gly Gly Ala Ala Gly Ala Thr Ser Leu
        115                 120                 125
Cys Phe Val Tyr Pro Leu Asp Phe Ala Arg Thr Arg Leu Ala Ala Asp
    130                 135                 140
Val Gly Lys Ser Gly Thr Glu Arg Glu Phe Arg Gly Leu Gly Asp Cys
145                 150                 155                 160
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Leu Val Lys Ile Thr Lys Ser Asp Gly Ile Arg Gly Leu Tyr Gln Gly
                165                 170                 175
Phe Ser Val Ser Val Gln Gly Ile Ile Ile Tyr Arg Ala Ala Tyr Phe
            180                 185                 190
Gly Val Tyr Asp Thr Ala Lys Gly Met Leu Pro Asp Pro Lys Asn Thr
        195                 200                 205
His Ile Val Val Ser Trp Met Ile Ala Gln Thr Val Thr Ala Val Ala
    210                 215                 220
Gly Val Val Ser Tyr Pro Phe Asp Thr Val Arg Arg Arg Met Met Met
225                 230                 235                 240
Gln Ser Gly Arg Lys Gly Ala Asp Ile Met Tyr Thr Gly Thr Val Asp
                245                 250                 255
Cys Trp Arg Lys Ile Phe Arg Asp Glu Gly Gly Lys Ala Phe Phe Lys
            260                 265                 270
Gly Ala Trp Ser Asn Val Leu Arg Gly Met Gly Gly Ala Phe Val Leu
        275                 280                 285
Val Leu Tyr Asp Glu Leu Lys Lys Val Ile
    290                 295
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<210> 7
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> primer used for human ANT1 amplification

<400> 7
ttatatctcg agtatgggtg atcacgcttg gagcttccta aag 43

<210> 8
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer used for human ANT1 amplification

<400> 8
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<210> 9
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer used for human ANT2 amplification

<400> 9
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<210> 10

<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer used for human ANT2 amplification

<400> 10
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<210> 11
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer used for rat ANT1 amplification

<400> 11
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<210> 12
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer used for rat ANT1 amplification

<400> 12
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<210> 13
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer used for rat ANT2 amplification

<400> 13
ctcgagatga cagatgccgc tgtgtcct 28

<210> 14
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer used for rat ANT2 amplification

<400> 14
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<210> 15
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Sequencing primer

<400> 15
tatgccatag catttttatc c 21

<210> 16
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Sequencing primer

<400> 16
cgccaaaaca gccaagct 18

<210> 17
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic polypeptide corresponding to a portion
of huANT3 located near the carboxy terminus.

<400> 17
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1 5 10 15

<210> 18
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Monospecific antibody specific to ANT3 derived
from a portion of the huANT3 polypeptide sequence

<400> 18
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1 5 10 15
Lys Ile Thr

<210> 19
<211> 16

<212> PRT
<213> Artificial Sequence

<220>
<223> Monospecific antibody specific to ANT2 derived
from huANT2.

<400> 19
Met Thr Asp Ala Ala Val Ser Phe Ala Lys Asp Phe Leu Ala Gly Cys
1 5 10 15

<210> 20
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Monospecific antibody specific to ANT1 derived
from huANT1.

<400> 20
Met Gly Asp His Ala Trp Ser Phe Leu Lys Asp Leu Leu Ala Gly Cys
1 5 10 15